Department of Health Western Australia

Submission to the Productivity Commission Public Inquiry into Waste Generation and Resource Efficiency

Impacts of Waste Generation and Resource Efficiency on the Community

The Department of Health Western Australia recognises efficient and appropriate waste management as an important component of achieving sustainability and maintaining healthy communities.

In recent years, the community of Western Australia has demonstrated growing concern regarding the location and operation of industrial facilities including the storage and management of wastes generated by these facilities, in the vicinity of residential areas. Complaints routinely relate to dust, odour and noise emissions from such operations as well as the concern associated with the potential health risks associated with components of the waste streams. Some of these problems are due to the encroachment of residential and other development for a growing population upon pre-existing industrial areas, and inappropriate past planning decisions.

The primary goal of the WA Waste Management Board is to achieve a waste free society by avoiding waste creation, maximising recovery and by using appropriate and sustainable disposal practices. However, this goal can only be achieved through implementation of national measures which address each of these components and provide for implementation and consistency through all three levels of government.

The management of waste includes collection, transport, sorting, and disposal. Through each of these processes, there is the potential for human exposure to environmental pollutants and subsequent health impacts when the waste is not appropriately managed.

Data from the WA Waste Management Board shows that from 1998 to 2004, the amount (tonnage) of municipal and commercial/industrial wastes increased significantly (18% and 21% respectively). As the population and allied waste generation continue to grow, there will be an ongoing need to identify new locations for the placement of waste management facilities.

Different types of waste require different treatments and facilities. Landfill is the most common method of disposal, and as such the shortage of appropriate landfill sites is a pressing issue. The current disposal of reusable resources to landfill is not sustainable and investment into alternatives, including education of the public, is of prime importance.

Waste management facilities need to be located close to the source to minimise costs and hazards associated with transport, and also at a sufficient distance from residential areas so as to not impact on the social and environmental quality of the community.

The environmental and social conditions in which people live are significant contributors to their health outcomes. Of prime importance is the nature and quality

of the built environment. Historically, many waste facilities have been located and operated near communities where socioeconomic status may be low. It is well documented that socially and economically disadvantaged people experience poorer health and die younger than those in more privileged positions.

Waste minimisation and better resource efficiency is predicted to help protect the health and overall quality of life, particularly for vulnerable communities.

The DOH is currently developing a discussion paper identifying options for implementing Health Impact Assessment (HIA) in Western Australia. Health impact assessment is the 'combination of procedures, methods and tools by which a policy, programme or project may be judged as to its potential effects on the health of a population and the distribution of those effects within the population' (ECHP WHO 1999).

The application of HIA to policies, programmes and projects in Western Australia will protect and improve the health of communities and reduce health inequalities.

While HIA will not be applied to all policies, programmes and projects, it is likely to be applied to large scale, complex or controversial proposals and these may include waste management facilities.

With the application of HIA, all Western Australians regardless of socioeconomic status should attain the ability to live in communities of a high social and environmental standard.

General waste management within the WA health system

To fulfil its own internal obligations under the West Australian State Sustainability Strategy, the DOH has formed a Sustainability Working Group to develop an agenda for the health system to identify projects which will help meet objectives of the State Sustainability Code of Practice. A component of these activities is consideration of wastes from the clinical and other departmental settings.

The wastes generated from clinical applications require special consideration. Pathology waste requires stricter management due to the potential hazards to human health from inappropriate disposal. Incineration is the current preferred practice for the disposal of pharmaceutical and cytotoxic substances, sharps and sensitive wastes (human tissue). Approximately 20% of clinical wastes from all metropolitan hospitals is incinerated, while in regional centres, where the quantity collected daily is below 200kg, it is disposed to landfill.

The current WA government process to investigate potential locations for facilities to treat hazardous and industrial waste has recommended that incineration is not to be permitted within these zones. Consistent policies across Australia for appropriate disposal of these substances need to be developed and supported.

An issue identified for action is the generation and management of non-clinical hospital waste. Sir Charles Gairdner Hospital a major metropolitan teaching hospital, actively participates in recycling. Hospital staff separate waste on the ward into

recyclables, confidential documents, clinical and general waste. General waste is then further sorted into inert and intractable waste. However, an examination of waste management of other hospitals shows that with the exception of clinical waste, most waste is directed to landfill. Recycling facilities exist in some hospitals for the sorting, storage and processing of paper, plastics, specific glass materials, drink containers, aluminium and other metals, although the facilities and extent of enforcement vary depending on the management procedures in place.

Recent statistics from the WA Waste Management Board indicate that commercial/industrial waste contributes 15-20% of the solid waste stream. Hospital waste is considered to be an important contributor to this total. The waste from approximately 70 hospitals across the State is managed under a whole of government contract administered by the Department of Treasury and Finance, with some health department input. This creates difficulties in ensuring that waste management within hospitals conforms to broader health system waste management policies.

DOH recognises that opportunities to improve the resource efficiency of Western Australian hospitals exist. There is potential to improve use and disposal of recyclable and other materials from the clinical environment which would result in a substantial reduction of waste to landfill. However, national practices and mechanisms to support medical environments to reduce or redirect their wastes are needed to provide for consistent and cost effective approaches.

It has also been identified that there may be a significant amount of waste generated from single use containers, for example plastic pill containers. Although the hazard associated with containers of this type is low, the current practice is for single use and reuse has not been encouraged. Consideration could be given to products generated specifically for the medical sector and addressed through national policy to provide for sustainable and cost effective outcomes.